

**ABSTRACT**

Disclosed herein is a traffic scheduling apparatus and method for a base station in a mobile communication system to transmit real-time and non-real-time data streams having different QoS (Quality of Service) that are requested to  
5 be transmitted to a particular mobile station. A delay adjuster is provided for determining transmission order so that the real-time traffic is transmitted preferentially over the non-real-time traffic. Also provided are a transmission buffer for receiving and storing the real-time and non-real-time data streams output in the transmission order determined by the delay adjuster, and a rate  
10 adjuster for calculating assigned power of a time slot serving as a transmission unit for transmitting a predetermined amount of traffic stored in the transmission buffer, changing the transmission order of the data streams according to available time slot power, and packing the data streams in the time slot according to the changed transmission order.